

ATTACHMENT G

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Comments of Western Wireless

in

**FEDERAL-STATE JOINT BOARD ON
UNIVERSAL SERVICE SEEKS COMMENT ON
CERTAIN OF THE COMMISSION'S RULES
RELATING TO HIGH-COST UNIVERSAL SERVICE
SUPPORT AND THE ETC DESIGNATION PROCESS**

CC Docket No. 96-45

May 5, 2003

**The Economic and Development Impacts of Western
Wireless Operations in Texas and the Value of Wireless
Services as Providers of Universal and Lifeline
Telecommunications Services**

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Section 1: Introduction

The following reports our findings regarding the economic, social, and development impacts of the operations of Western Wireless telecommunications in its Texas service areas. Our analysis consists of three components. In the first, we examine the economic impacts of Western Wireless' universal service operations on the counties where it currently offers services. Part two assesses the benefits that accrue to low-income families from Western Wireless' entry into the universal service market. Finally, we address broad issues on the role telecommunications services plays in the economic development of non-metropolitan regions and how wireless telecommunications offerings can promote regional economic and community development.

Western Wireless currently serves communities in 46 Texas counties. These communities are largely rural in nature with relatively few choices in wireless or traditional telecommunications services. Table 1 provides a listing of the 48 central towns within Western Wireless' service area.

Table 1. Western Wireless Texas Markets

Central City of Market Area			
Albany	Amherst	Anson	Anton
Aspermont	Baird	Benjamin	Big Lake
Bronte	Canadian	Christoval	Eldorado
Estelline	Forsan	Fort Davis	Groom
Gruver	Hale Center	Hamlin	Hedley
Knox City	Lakeview	Lefors	Lockney
Marfa	McLean	Mentone	Mertzson
Midkiff	Mobeetie	Moran	Panhandle
Petersburg	Robert Lee	Rochester	Roscoe
Rule	Shamrock	Sierra Blanca	Spade
Spearman	Sterling City	Toyah	Valentine
Van Horn	Wheeler	White Deer	Whiteface

Section 2: Economic Impacts of Initial Capital Investment and Operations

In this section we report the findings of our economic impact analysis of Western Wireless cellular telecommunications operations in Texas. Our estimates are based on operating expenditure and output data provided by Western Wireless using the IMPLAN impact modeling system developed by the Minnesota IMPLAN Group. This model, which is well-regarded by academic and professional researchers, provides reasonable and conservative estimates of direct, indirect, and induced impacts. Direct economic impacts represent direct spending for goods and services supporting the provision of telecommunication services within the counties served by Western Wireless. Indirect impacts occur when the company's vendors spend money in the local economy to support their business operations. Finally, induced impacts are those that result from employees and sales representatives spending a portion of their earnings in the area for groceries, household goods, dining, entertainment, and all other goods and services.

One of the primary economic advantages of wireless telecommunications services is the comparatively low level of capital investment required to initiate service when compared to traditional landline services. These lower costs allow Western Wireless to bring modern, effective telecommunication services to Texas' sparsely populated areas. However, even though initial capital expenditures are *comparatively* low, these outlays nonetheless represent substantial investment in Western Wireless' service communities. Latest available data show that Western Wireless has spent more than \$625 million to bring wireless services to its Texas markets. These expenditures temporarily boosted economic activity in the Western Wireless service area by a total of \$641.3 million, created more than 460 full-time-equivalent jobs, and increased labor income \$18.4 million (see Table 2).

Table 2

Temporary Impacts of Western Wireless Capital Investment in Texas

Description	Impact
Capital Spending	\$625,000,000
Total Economic Activity	\$641,308,000
Income	\$18,394,000
Employment (FTE)	463

Western Wireless employs more than 200 FTE staff in serving its Texas markets. In addition, cellular tower site landowners receive rental income on their land. In total Western Wireless' ongoing operations in Texas increase economic activity in its local markets by an amount exceeding \$66 million per year. This activity supports 276 FTE direct and indirect jobs paying over \$12 million per year in salaries wages (see Table 3). As Western Wireless continues to expand, these impacts will grow in tandem.

Table 3

Local Economic Impacts of Western Wireless Operations in Texas

Description	Impact
Economic activity	\$66,441,000
Income	\$12,036,000
Employment (FTE)	277

Section 3: Impacts of Western Wireless Rates

In this section we explore the cost savings and resulting economic benefits from the introduction of Western Wireless' competitive universal service offerings. Western Wireless consistently offers lower rates than incumbent carriers in its Texas markets. One of their current universal service offerings is a \$14.99 per month rate plan that includes unlimited local usage and an expanded local calling area that is about \$10 per month lower than the average rates of the incumbent service providers. This means existing Western Wireless customers are saving a total of more than \$600,000 each year on their basic wireless telecommunications services (see Table 4). Given that Western Wireless also prices additional universal service offerings and services very competitively, total savings are likely to be substantially higher.

In addition, as Western Wireless continues to expand its market penetration into Texas markets, incumbent carriers will likely lower their rates to remain competitive. For example, if incumbent telecommunications service providers were to lower their basic service rates by just \$5 per month to compete with Western Wireless' rate plans, their customers would save almost \$1 million per year on their telecommunications services.

Perhaps the most important cost saving feature of wireless telecommunications services is expanding the effective non-toll intra-LATA calling area. Most any resident or visitor to Texas's rural areas can recall paying long distance toll charges to phone a household that is literally within sight. Based on data compiled by Kridell, et al (2001)² and the IMPLAN impact model, we estimate that households in the counties where Western Wireless currently offers services spend about \$86 million per year for intra-LATA toll calls. Western Wireless households probably save more than \$1 million per year by having an expanded local calling area. Our estimates do not include savings enjoyed by all telecommunications customers as incumbent carriers expand their non-toll calling areas to compete with Western Wireless. Thus, our cost savings estimates are conservative. Total savings for rural consumers in Texas may well exceed \$2.7 million per year, and these savings translate into broader economic impacts.

On an individual level, the savings offered and induced by Western Wireless are a few hundred dollars per year per household; however, in aggregate they have an appreciable impact on local economic activity. Assuming the cost savings are fully spent,³ substitute spending on retail goods, dining, and other local purchases boost total

local economic activity. This is because almost one-half of every dollar spent on telecommunications services in Western Wireless' Texas markets actually supports economic activity in other areas, whereas most of the impact of spending on retail goods, dining, and other services tends to stay in the local area. More telling is the impact on jobs. Because retailers and hospitality industries spend a much larger proportion of their total receipts for labor compared to telecommunications services providers, substituting retail spending for telecommunications spending can create net new local jobs. Using the IMPLAN modeling system, \$2.7 million in annual spending for telecommunications services will support about 14 jobs in the Western Wireless service area. This same spending divided between retailers and dining establishments in the same area will support 87 jobs, a net increase of 73 jobs.

Table 4
Economic Impact of Savings to Texas Customers

Description	Impact
Savings	
Total annual savings for Western Wireless subscribers	\$ 613,000
Total potential annual savings from competitive response by other carriers	\$ 962,000
Total potential savings from expanded local calling areas	\$ 1,160,000
Total potential annual savings	\$ 2,735,000

Impacts of Savings on Economic Activity	
Economic impact of telecommunications spending	\$ 3,407,000
Economic impact of equal spending on retail and dining	\$ 3,930,000
Net gain in economic activity	\$ 523,000

Impacts of Savings on Job Creation	
Local jobs supported by \$2.735 million in retail and dining spending	87
Local jobs supported by \$2.735 million in telecommunications spending	14
Net gain in employment	73

The rate savings described here are especially valuable to low-income ratepayers. Saving a few hundred dollars per year means these households can better afford other living necessities. Almost one-fourth of all expenditures for telecommunications services in the counties served by Western Wireless are made by households with annual incomes less than \$15,000. There is a clear and substantial social benefit to having Western Wireless participate in life-line and universal service programs, due simply to the lower rate structure that allows low-income households to utilize telecommunications services in ways that most Texas residents take for granted.

Section 4: Impact of Wireless Telecommunications on Rural Economic Development

As the US continues its decades-long shift to an information-based economy, the presence of effective, efficient, and affordable telecommunications is a necessary, if not sufficient, condition for economic growth. In a 2001 survey of local and regional economic development organizations in the US, more than half identified working to expand their local telecommunications infrastructure as a capacity building activity.⁴ In other words, telecommunications services are essential to rural areas because enhanced connectivity is the key to improving the provision of local services, increasing the viability of local businesses, and reducing the pernicious business effects of isolation.⁵ These observations are especially applicable to the provision of broadband telecommunication services. With the continuing spread of electronic data interchange as the key medium for managing supply chains across an increasingly global geography, the *basic* level of telecommunications services required to meet the necessary conditions for economic growth are at broadband channel capacities.

Because of low population densities, the expansion of telecommunications services into rural areas has traditionally relied on government subsidies, mostly through agencies such as the Rural Electrification Administration and state regulation of rates providing cross-subsidization to rural carriers. However, with the expansion of rate deregulation and the opening of local telecommunications markets to competition, which may reduce incumbent carriers' financial ability to subsidize rural services with rates paid by urban customers, there is less likelihood rural areas will continue to obtain the telecommunications services they need to compete for industrial site locations – at least based on landline services.

As observed by Wohlbruck and Levy (2001): “[Wireless telecommunications] will become the dominant technology for most remote and low-density telephone cooperatives...for bringing broadband services to rural areas.”⁶ As technology enhances the ability to support broadband telecommunications service with comparatively low-cost wireless technologies, rural areas will be able to maintain, and perhaps increase, their ability to compete with urban and suburban communities for business expansion and relocations. These new services will be first offered in communities with high-quality existing cellular telephone infrastructures. However, recent market conditions are hampering new technology development and the expansion of even basic wireless telecommunication services.

Between March 2000 and September 2001, the S&P Communications Services Index fell 43 percent taking \$150 billion in equity off the market.⁷ The resulting loss of investor confidence has crippled the ability of telecommunications service providers to raise capital for expanding services and to fund development of new services. Moreover, with the continuing weakness in the overall economy, it still appears that industry-wide loan defaults are strong possibilities in the telecom sector. Industry analysts expect recovery in the telecommunications industry will lag other economic sectors.⁸

The downturn in the telecommunications industry and the inability of telecom service providers to tap financial markets for new capital will be especially problematic for carriers operating in rural markets. Despite efforts to introduce competition, even in

high-population density urban markets, incumbent carriers maintain a stranglehold on residential local voice markets.⁹ There is less incentive than ever before for incumbent telecommunication service providers to offer cost-effective rates and services to customers in rural markets. A competitive response to new market entrants remains the best way to encourage the provision of competitive rates and services for residential telephone customers in Texas' rural areas. The challenge will be to implement policies that can attract these new market entrants.

Western Wireless and other wireless telecommunications companies operating across the nation have taken an innovative approach for quickly developing the market base to justify entry or expansion of services in rural markets. Through their entry into the universal service market, Western Wireless is allowing rural households to use their cellular phones just like a landline system. This further allows residential users to take advantage of expanded local calling areas and reduced basic monthly rates, as discussed earlier. This universal service strategy enables wireless telecommunications to become the basic phone service for rural residents.

The low basic rates and expanded local calling areas are especially attractive to those who are least able to afford basic utility services. Lifeline and universal service households using wireless services can more readily participate in telecommunications-based social networks, which are particularly important to elderly households for safety and security. Putting it simply, the benefits intended to be provided by Texas' telecommunications lifeline and universal service programs are leveraged to much higher levels by having these services offered by providers such as Western Wireless.

Section 5: Conclusion

Rural communities across America, including those in Texas, are under severe economic strain as more and more households and businesses aggregate in urban areas. However, because broadband telecommunications networks can bring rural communities into the economic mainstream, distance does not have to mean isolation.

Wireless technology offers the best hope for developing an advanced telecommunications infrastructure in rural Texas while keeping costs at a competitive level. The key to accelerating this development will be to qualify companies such as Western Wireless as providers of universal and lifeline telecommunications services.

ENDNOTES

1. Terry L. Clower is associate director for the Center for Economic Development and Research at the University of North Texas. Prior to joining UNT in January 1992, Dr. Clower was employed in private industry in logistics and transportation management positions. Clower received a B.S. in Marine Transportation from Texas A&M University in 1982, a M.S. in Applied Economics from the University of North Texas in 1992 and a Ph.D. in Information Sciences from the University of North Texas in 1997 specializing in information policy issues and the use of information resources. Bernard L. Weinstein is director of the Center for Economic Development and Research and a professor of applied economics at the University of North Texas in Denton. He also serves as director of the Institute of Applied Economics, which offers masters degree programs in economic development. Dr. Weinstein studied public administration at Dartmouth College and received his B.A. in 1963. After a year of study at the London School of Economics and Political Science, he began graduate work in economics at Columbia University, receiving an M.A. in 1966 and a Ph.D. in 1973.

2. Kridell, D., Rappoport, P. & Taylor, L. (2001). Competition in Intra-LATA Long Distance: Carrier Choice Models Estimated from Residential Phone Bills. *Information Economics & Policy*, 13, 267-282.

3. Given the low rate of savings by households in the US, it is reasonable to assume that any savings realized from lower telecommunications service costs will likely be spent on other goods and services.

4. Clower, T. (forthcoming). Local Development in the United States of America. In Beer, Maude, and Haughton.. Bristol, UK. The Policy Press.

5. Stenberg, P., Rahman, S., Perrin, M., & Johnson, E. Rural areas in the new telecommunications era. *Rural Development Perspectives*, 12(3), 32-38.

6. Wohlbruck, A. & Levy, M. (2001). Overview of broadband technologies. *Economic Development Digest*, 12(3).

7. Thompson, J. (2002). Is telecom disconnected or just on hold? *Southwest Economy*, Issue 1.

8. Ibid.

9. Smith, M. & Price, C. (2002). Carriers rediscover enterprise customers. *Business Communications Review*. 32(11), 40-44.